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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/637,400	08/11/2000	Venkataraman Ramanathan	204861	7300

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EXAMINER

KUMAR, UTTAM

ART UNIT

PAPER NUMBER

2157

DATE MAILED: 10/27/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/637,400

Applicant(s)

RAMANATHAN ET AL.

Examiner

Ultam Kumar

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 states that copying of information is a step of excluding information. This language is unclear and should be amended. Further, claim 2 does not specify from where the information is copied.
3. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claim 17 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in Paper No. 1 filed August 11, 2000. In that paper, applicant has stated the TWTCB, formed by copying a portion of the TCB, contains sufficient information to identify the TCP/IP connection, and this statement indicates that the invention is different from what is defined in the claim(s) because claim 17 claims that the information contained in the TWTCB does not contain sufficient information to identify the TCP/IP connection. This is contradictory to what the applicants are claiming as their invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-16 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Recio et al (U.S. 6,035,418) in view of Coile et al (U.S. 6,298,380).

6. As to claims 1, 11, and 18, Recio et al discloses a system and method for improving resource utilization in a TCP/IP connection management system that teaches:

- closing a TCP/IP connection to create a timed-wait state (column 2, lines 38-46, lines 53-59).
- releasing of memory containing the information required to service the client connection (column 2, lines 46-47). Sending the TCB back to the web server is equivalent to releasing memory containing information about the connection.

7. Recio et al does not teach excluding information from the TCB not required to identify the client connection.

8. Coile et al discloses a method and apparatus for reducing overhead on a proxied connection that teaches excluding information from the TCB not required to identify the client connection (column 3 line 67- column 4 line 8). The smaller connection object that Coile et al refers to is equivalent to the smaller TCB described in the invention.

9. It would have been obvious to one of ordinary skill in the art to implement Coile et al's smaller connection object in creating a time-wait TCB as described by Recio et al.

The motivation to do so would be to have less memory overhead during data transfer.

10. As to claims 2, 12, and 19 Coile et al further teaches the step of excluding comprises the step of copying the information required to identify the client connection to form the TWTCB (column 9, lines 5-22). In order to maintain the smaller connection object, the information must be copied from somewhere.

11. It would have been obvious to one of ordinary skill in the art to implement Coile et al's smaller connection object in creating a time-wait TCB as described by Recio et al.

The motivation to do so would be to have less memory overhead during data transfer.

12. As to claim 3 and 20, Recio et al further teaches releasing the memory includes the step of releasing the TCB required to identify the client connection (column 2, lines 46-47).

13. As to claim 4, Recio et al further teaches maintaining a minimum of information necessary to avoid late-routed packets forming new connections on the server (column 2, lines 53-56).

14. As to claims 5-10, 13-16 and 21-23, Coile et al further teaches excluding information not required to identify the client connection comprises the step of forming a TWTCB that occupies less memory than the TCB (column 9, lines 5-12). The smaller connection object described by Coile et al is equivalent to the TIMED_WAIT transmission control blocks described by the claims, and could be coded as described by claims 5, 6, 15, 16, 22, or 23 by anyone of ordinary skill in the art. These coded

structures yield the smaller sized TWTCBs claimed in claims 8, 9, 10, 13, 14, and 21, as described in the specification. Therefore, these TWTCBs fall within the scope of Coile et al's smaller connection object.

15. It would have been obvious to one of ordinary skill in the art to implement Coile et al's smaller connection object in creating a time-wait TCB as described by Recio et al. The motivation to do so would be to have less memory overhead during data transfer.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. ***

- U.S. 5,892,925, Aditya et al.

Method of Communicating Data from a Host to a Network Controller

This patent describes a reduced TCB fragment structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uttam Kumar whose telephone number is 703-305-0719. The examiner can normally be reached on M-Th 7:30-5; Every other Friday 8-4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 703-308-7562. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Uttam Kumar
Art Unit 2157
October 15, 2003


ARIO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100